

Record of Proceedings, Including Reasons for Decision

In the Matter of

Applicant Cogema Resources Inc.

Subject Application to conduct weather-sensitive surface
preparation activities at the proposed Sue E pit
Uranium Mine

Date July 21, 2005

RECORD OF PROCEEDINGS

Applicant: Cogema Resources Inc.

Address/Location: P.O. Box 9204 – 817, 45th Street West, Saskatoon, SK S7K 3X5

Purpose: Application to conduct weather-sensitive surface preparation activities at the proposed Sue E pit Uranium Mine at the McClean Lake Uranium Mine and Mill Operation

Application received: May 17, 2005

Date(s) of hearing: July 13, 2005

Location: Canadian Nuclear Safety Commission (CNSC) Public Hearing Room, 280 Slater St., 14th. Floor, Ottawa, Ontario

Members present: L.J. Keen, Chair
M. J. McDill
M. Taylor

General Counsel: J. Lavoie
Secretary: M.A. Leblanc
Recording Secretary: S. Gingras

Applicant Represented By	Document Number
• B. Pollock, Vice-President, Environment Health and Safety	CMD 05-H16.1
• J. Corman, General Manager of the McClean Lake Operation	CMD 05-H16.1A
CNSC Staff	Document Number
• B. Howden	CMD 05-H16 CMD 05-H16.A
• R. Forbes	
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• T. Moulding, Saskatchewan Environment	
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Licence: Amended
Date of Decision: July 13, 2005

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1. Introduction

Cogema Resources Inc. (COGEMA) has applied to the Canadian Nuclear Safety Commission (CNSC¹) for authorization to proceed with preparatory work associated with the proposed open-pit mining of the Sue E orebody (Sue E pit) at the McClean Lake Uranium Mine and Mill Operation in northern Saskatchewan. COGEMA is seeking permission to commence limited, weather-sensitive work on the surface of the proposed mine site during the 2005 summer season, prior to the Commission considering and rendering a decision on COGEMA's application for the full Sue E mine project.

In making its application, COGEMA stated that the preparatory work should be completed before winter freeze-up for environmental and safety reasons. COGEMA further acknowledged that it would conduct the work at its own financial risk, including with respect to any remediation work that would be required in the event that the application for the full Sue E mine is not approved by the Commission.

The Commission decided to consider COGEMA's application for the proposed preparatory work at the Sue E mine site. In doing so, the Commission is satisfied that this would not prejudice its consideration of the application for the full Sue E mining project later in 2005.

COGEMA is currently authorized by the CNSC to operate a uranium mine and mill at McClean Lake, Saskatchewan and to maintain the facilities necessary to support its operation. The current licence also authorizes COGEMA to possess, store, transfer, import, use, and dispose of nuclear substances and radiation devices. Authorization to proceed with the proposed preparatory work at the Sue E site would require that the Commission amend the existing licence for the McClean Lake Operation.

Issues:

In considering the application, the Commission was required to decide, pursuant to subsection 24(4) of the *Nuclear Safety and Control Act*:

- a) if COGEMA is qualified to carry on the activity that the amended licence would authorize; and
- b) if, in carrying on that activity, COGEMA would make adequate provision for the protection of the environment, the health and safety of persons and the maintenance of national security and measures required to implement international obligations to which Canada has agreed.

¹ In this *Record of Proceedings*, the *Canadian Nuclear Safety Commission* is referred to as the "CNSC" when referring to the organization and its staff in general, and as the "Commission" when referring to the tribunal component.

Public Hearing:

The Commission, in making its decision, considered information presented for a public hearing held on July 13, 2005 in Ottawa, Ontario. The public hearing was conducted by a panel of the Commission in accordance with the *Canadian Nuclear Safety Commission Rules of Procedure*. During the public hearing, the Commission received written submissions and heard oral presentations from CNSC staff (CMD 05-H16 and CMD 05-H16.A) and COGEMA (CMD 05-H16.1, CMD 05-H16.1A). There were no intervenors.

2. Decision

Based on its consideration of the matter, as described in more detail in the following sections of this *Record of Proceedings*, the Commission concludes that COGEMA is qualified to carry on the activity that the amended licence would authorize. The Commission is also satisfied that COGEMA, in carrying on that activity, will make adequate provision for the protection of the environment, the health and safety of persons and the maintenance of national security and measures required to implement international obligations to which Canada has agreed. Therefore,

the Commission, pursuant to section 24 of the *Nuclear Safety and Control Act*, amends Uranium Mine Operating Licence UMOL-MINEMILL-McCLEAN.01/2009. The amended licence (UMOL-MINEMILL-McCLEAN.02/2009) is valid until May 30, 2009, unless otherwise suspended, amended, revoked, or replaced.

The Commission includes in the amended licence the conditions recommended by CNSC staff, as set out in the draft licence attached to CMD 05-H16.A.

3. Issues and Commission Findings

In making its licensing decision under section 24 of the *Nuclear Safety and Control Act*, the Commission considered a number of issues relating to COGEMA's qualifications to carry out the proposed activities, and the adequacy of the proposed measures for protecting the environment, the health and safety of persons, national security and international obligations to which Canada has agreed. The Commission's findings on these issues are summarized below.

3.1 Radiation Protection

As part of its evaluation of the adequacy of the provisions for protecting the health and safety of persons, the Commission considered whether the proposed preparatory work posed any risk to the workers or the public from radiation.

In this regard, CNSC staff reported that the proposed activities would not be associated with radiation and therefore no addition or modification of COGEMA's approved radiation protection program at the McClean Lake Operation would be necessary to carry out the proposed activity.

Based on this information, the Commission is satisfied that the proposed project does not pose a radiation risk and that additional provisions to protect persons from radiation would not be required. The Commission is satisfied that COGEMA's current radiation protection program at the McClean Lake Operation is adequate to address any other incidental radiation hazards at the project site.

3.2 Environmental Protection

The Commission considered whether COGEMA will make adequate provision to protect the environment during the proposed preparatory work at the Sue E site.

In this respect, COGEMA expressed the view that it would be environmentally preferable and safer for the workers to complete the identified tasks prior to freeze-up. As examples, COGEMA explained that pipelines built during the summer are less likely to develop leaks later, and that the organic top soil could be removed and stored for future remediation of the site after the mining is completed. CNSC staff concurred that the conservation of top soil for future site remediation would be desirable for the future rehabilitation of the site.

In response to questions from the Commission on how the site would be restored in the event that the mining does not proceed, COGEMA stated that all of the proposed summer work would be reversible with minimal effect on the environment. CNSC staff concurred with this statement by COGEMA, and confirmed that COGEMA has the financial resources in place to perform this remediation work if necessary.

CNSC staff reported that it had received COGEMA's submission and that the final design was under review. CNSC staff considers that COGEMA is an experienced operator and has the policies and programs in place to perform the proposed activities without significant adverse impacts on the environment.

The Commission sought further information on the dike proposed to be built in the adjacent lake to allow for partial dewatering of the lake. In response, COGEMA explained that while an engineered dike was initially thought to be necessary, more recent test pit results show that there is sufficient till material of low permeability available on the site to allow a stockpile barrier to be built with that material. CNSC staff explained that the method of constructing such barriers in water bodies with local material with suitable permeability and texture has been successfully used at other uranium mine sites.

In a follow-up question, the Commission questioned whether there was any potential for the dike/stockpile barrier to cause flooding in the lake. In response, COGEMA stated that the lake is a perched lake and that there are no plans to change its outflow. COGEMA further noted that, if necessary, the lake level could be maintained with a water pipeline. CNSC staff stated that it is reviewing the potential effects of the proposed Sue E mine on the lake as part of its assessment

of COGEMA's geotechnical report and that CNSC staff approval would be required before the dike or barrier is constructed. CNSC staff recommended that the Commission include a condition in the amended licence to this effect. Despite the fact that CNSC staff has not completed the review of the geotechnical report, the Commission is satisfied that the options have been noted and that there will be CNSC staff oversight of the design and implementation.

Based on the above information, the Commission is satisfied that COGEMA has made, and will continue to make, adequate provision for the protection of the environment during the proposed preparatory summer work.

The Commission accepts the above-noted CNSC staff recommendation for a licence condition concerning the construction of the dike/barrier in the adjacent lake. The Commission requests that CNSC staff pay close attention to the design and other issues related to the construction of the barrier.

The Commission is satisfied that COGEMA understands that it would proceed with the weather sensitive preparatory work entirely at its own financial risk, including with respect to the cost incurred for remedial work in the event the mining licence for the Sue E pit is not granted by the Commission.

3.3 Conventional Health and Safety

As part of its evaluation of the adequacy of provisions for protecting the health and safety of persons, the Commission also considered issues related to conventional (non-radiological) health and safety during the proposed preparatory summer work at the Sue E pit site.

CNSC staff reported that it considers COGEMA's health and safety program and its implementation to be acceptable for the purpose of the project.

The Commission questioned whether the risks to health and safety would be appreciably different or higher if the proposed work were to be carried out after freeze-up. In response, COGEMA explained that a principal advantage to carrying out the work in unfrozen ground conditions is that the ultimate stability of the pit wall would be enhanced and, therefore, the integrity of the physical barrier between the flooded and dewatered part of the lake could be better assured. Representatives from Saskatchewan Labour and CNSC staff concurred with COGEMA's statements in this regard.

Based on this information, the Commission is satisfied that COGEMA will make adequate provision for the protection of persons from conventional (non-radiological) hazards during the completion of the proposed preparatory summer work at the proposed Sue E pit.

3.4 Emergency Preparedness and Fire Protection

With respect to the protection of persons and the environment during emergencies that could arise at the Sue E pit, CNSC staff reported that it considers COGEMA's emergency preparedness program and its implementation to be acceptable.

Based on this information, the Commission is satisfied that COGEMA will be adequately prepared for emergencies that could arise during the proposed preparatory work at the Sue E pit.

3.5 Decommissioning Plan and Financial Guarantee

With respect to the decommissioning plan and related financial guarantee for the Sue E pit at the McClean Lake facility, COGEMA reported that the McClean Lake Operation *Preliminary Decommissioning Plan and Financial Assurance* document (PDP) has been updated to include the future decommissioning of the facility. This document has been submitted to Saskatchewan Environment and CNSC staff for review and acceptance. COGEMA is of the view that the amount of financial guarantee needed (\$35 million) is still sufficient to cover the proposed preparation and later development of the Sue E pit. CNSC staff noted that the revised PDP is under review as part of its assessment of COGEMA's application to develop the mine. Saskatchewan Environment reported that it has accepted the revised PDP. CNSC staff concurred that the present financial guarantee is sufficient to cover the proposed weather-sensitive preparatory work at the Sue E site.

Based on this information, the Commission considers that the PDP and related financial guarantee are acceptable for the purpose of the current application for licence amendment.

3.6 Public Information

With respect to the CNSC's requirement that licensees maintain acceptable public information programs, CNSC staff reported that it considers COGEMA's current program and its implementation to be acceptable.

Based on the above information, the Commission is satisfied that COGEMA has an acceptable public information program in place for the purpose of the proposed preparatory work at the Sue E site.

3.7 Safeguards and Non-Proliferation

Concerning the requirement for COGEMA to make adequate provision to ensure maintenance of Canada's international obligations for safeguards and non-proliferation, CNSC staff noted that it considers COGEMA's current program and its implementation at the McClean Lake Operation to be acceptable. The proposed preparatory work at the Sue E pit site would not affect the program or its implementation.

Based on this information, the Commission is satisfied that COGEMA has adequate provisions for safeguards and non-proliferation at the McClean Lake Operation pit that are necessary for

maintaining national security and measures necessary for implementing international agreements to which Canada has agreed.

3.8 Canadian Environmental Assessment Act

Before making a licensing decision, the Commission must be satisfied that all applicable requirements of the *Canadian Environmental Assessment Act* (CEAA) have been fulfilled. CNSC staff stated that the proposed preparatory activities at the Sue E site were considered as part of an earlier environmental assessment conducted pursuant to the CEAA for the full Sue E project.

With respect to that earlier environmental assessment, the Commission, following a public hearing held on June 29, 2005, in Ottawa, Ontario, announced on July 12, 2005 its conclusion that the Sue E Project, taking into account identified mitigation measures, is not likely to cause significant adverse environmental effects.

The Commission therefore accepts the CNSC staff's determination that a separate environmental assessment is not required pursuant to the CEAA prior to the Commission making a decision on the current application for amendment of the licence.

4. Conclusion

The Commission has considered the information and submissions of the applicant and CNSC staff.

The Commission is satisfied that COGEMA is qualified to carry on the activity that the amended licence will authorize. The Commission is also satisfied that COGEMA, in carrying on that activity, will make adequate provision for the protection of the environment, the health and safety of persons, and the maintenance of national security and measures required to implement international obligations to which Canada has agreed.

The Commission includes in the amended licence the conditions recommended by CNSC staff, as set out in the draft licence attached to CMD 05-H16.A.

Marc A. Leblanc
Secretary,
Canadian Nuclear Safety Commission

Date of decision: July 13, 2005

Date of release of Reasons for Decision: July 21, 2005